## **AMENDMENTS TO THE CLAIMS:**

This listing of claims replaces all prior versions of the claims in the application.

- 1. (Currently Amended) A method for allocating a dedicated channel—for transmitting a packet at a code division multiple access (CDMA) media access control (MAC) layer control unit to transmit a packet data between a mobile station (MS) and a base station (BS) in a CDMA mobile communication system including the MS and the BS, the method comprising the steps of:
- a) when the packet is generated, by a MAC layer control unit of the MS, determining a service option of the packet; and
- b) if the service option of the packet is a packet burst mode service, transmitting the packet via a common traffic channel (CTCH), and if the service option of the packet is link-oriented a packet data mode service, by the MAC layer control unit of the MS, requesting to allocate a dedicated control channel (DCCH) and, receiving the DCCH;
- e) by the MAC layer control unit of the MS, requesting to allocate a dedicated traffic channel (DTCH) and, receiving the DTCH; and
- d) by the MAC layer control unit of the MS, and transmitting the packet via the DTCH.
- 2. (Original) The method as recited in claim 1, wherein the MAC layer control unit of the MS is transited to a suspended state, before determining the service option of the packet.

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- 3. (Original) The method as recited in claim 1, wherein the MAC layer control unit of the MS requests a MAC layer control unit of the BS to allocate the DCCH.
- 4. (Currently Amended) The method as recited in claim 1, <u>further comprising</u> wherein the step c) includes the steps of:
- e1) if the DCCH is allocated before a suspended state timer is expired, transiting the MAC layer control unit of the MS to a control hold state; and
- e2)—, before requesting the MAC layer control unit of the BS to allocate the DTCH.
- 5. (Currently Amended) The method as recited in claim 1, <u>further comprising</u> wherein the step d) includes the step of:
- d1)— if the DTCH is allocated before a control hold state timer is expired, transiting the MAC layer control unit of the MS to an active state before transmitting the packet via the DTCH;
  - d2) transmitting the packet, before an active state timer is expired; and
- d3) after the active state timer is expired, transiting the MAC layer control unit of the MS to the control hold state.
  - 6. (Cancelled)
- 7. (Currently Amended) The method as recited in claim 5, further comprising wherein step d) further includes the step of:

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- d4)— if the DTCH is not allocated before a control hold state timer is expired, transiting the MAC layer control unit of the MS to the suspended state or back to the control hold state.
- 8. (Currently Amended) The method as recited <u>in</u> claim 7, wherein a probability of transiting to the suspended state equals  $(1-\mu_D)$  /Tc and a probability of transiting back to the control hold state equals  $(1-\mu_D)$  (1-(1/Tc)) where the  $\mu_D$  denotes a request rate of the DTCH and Tc denotes a control hold state timer value.
- 9. (Currently Amended) The method as recited in claim 4, <u>further comprising</u> wherein step c) further includes the step of:
- d3) if the DCCH is not allocated before a suspended state timer is expired, transiting the MAC layer control unit of the MS to a dormant state or back to the suspended state.
- 10. (Original) The method as recited in claim 9, wherein a probability of transiting to the dormant state equals  $(1-\lambda_D)$  /Ts and a probability of transiting back to the suspended state equals  $(1-\lambda_D)$  (1-(1/Ts)) where the  $\lambda_D$  denotes a request rate of the DCCH and Ts denotes a suspended state timer value.

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